Amendments to the Claims:

This listing of claims will replace all prior version, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A method for providing a cryptographic service utilizing a server on a network, comprising:

(a) identifying a client utilizing the network;

(b) establishing a first key;

(c) generating a tunnel on the network;

(d) receiving information at the server from the client utilizing the tunnel, wherein the information is encrypted by the client using the first key; and

(e) performing ~~work~~ the cryptographic service at the server for the client.

2. (original): A method as recited in claim 1, wherein a second key is encrypted by the client using the first key, and further comprising receiving the second key at the server.

3. (currently amended): A method as recited in claim 2, wherein the second key comprises at least one parameter for the ~~work~~ cryptographic service performed by the server.

4. (canceled)

5. (currently amended): A method as recited in claim 1, wherein the cryptographic service ~~work~~ includes modular exponentiation.

6. (currently amended): A method as recited in claim 1, further comprising the step of transmitting cryptographic service~~work~~ results to the client.

7. (currently amended): A method as recited in claim 6, further comprising: the step of encrypting the cryptographic service ~~work~~ results utilizing the first key.

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8. (currently amended): A method as recited in claim 6, wherein the cryptographic service ~~work~~ results are transmitted to a third party.

9. (currently amended): A method as recited in claim 1, further comprising the step of charging a fee for the cryptographic service ~~work~~ performed by the server.

10. (original): A method as recited in claim 9, wherein the fee is charged to the client.

11. (original): A method as recited in claim 1, wherein the first key comprises an encryption key for a symmetric cipher.

12. (original): A method as recited in claim 1, wherein the first key comprises an encryption key for an asymmetric cipher.

13. (currently amended): A computer program embodied on a computer readable medium for providing a cryptographic service utilizing a server on a network, comprising:

(a) a code segment for identifying a client utilizing the network;

(b) a code segment for establishing a first key;

(c) a code segment for generating a tunnel on the network;

(d) a code segment for receiving information at the server from the client utilizing the tunnel, wherein the information is encrypted by the client using the first key; and

(e) a code segment for performing the cryptographic service ~~work~~ at the server for the client.

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14. (original): A computer program as recited in claim 13, wherein a second key is encrypted by the client using the first key, and further comprising a code segment for receiving the second key at the server.

15. (currently amended): A computer program as recited in claim 14, wherein the second key comprises at least one parameter for the cryptographic service ~~work~~ performed by the server.

16. (canceled)

17. (currently amended): A computer program as recited in claim 13, wherein the cryptographic service ~~work~~ includes modular exponentiation.

18. (currently amended): A computer program as recited in claim 13, further comprising a code segment that transmits the cryptographic service ~~work~~ results to the client.

19. (currently amended): A computer program as recited in claim 18, further comprising a code segment that encrypts the cryptographic service~~the work~~ results utilizing the first key.

20. (currently amended): A system for providing a cryptographic service utilizing a server on a network, comprising:

(a) logic for identifying a client utilizing the network;

(b) logic for establishing a first key;

(c) logic for generating a tunnel on the network;

(d) logic for receiving information at the server from the client utilizing the tunnel, wherein the information is encrypted by the client using the first key; and

(e) logic for performing the cryptographic service ~~work~~ at the server for the client.

21. (currently amended): A method as recited in claim 3, wherein a message or a cyphertext comprises a second parameter for the cryptographic service~~the work~~ performed by the server.

22. (original): A method as recited in claim 21, wherein the message or cyphertext has been blinded by the user before transmittal to the server.